

## **Brooks, Laura**

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**From:** Brooks, Laura  
**Sent:** Monday, August 01, 2005 9:49 AM  
**To:** Rampe, John; 'Kimmel.Larry@epamail.epa.gov'; Sattelberg, Mark; Castaneda, Norma; Surovchak, Scott; Shelton, Dave; Walstrom, Jan; Wiemelt, Karen; Ainscough, Harlen; Spreng, Carl; 'aguilar.mark@epamail.epa.gov'; 'David Kruchek'  
**Subject:** FW: FW: Draft response to comments on the PhysicalCharacteristics SR

A re-revised response to comment:

Figure 2, RFETS Surface Features after Accelerated Actions, will be revised for the final draft RI/FS Report to reflect the remaining surface features after accelerated actions are complete. This will include the functional channel configuration. A new Figure 3 will be created displaying overland flow directions and delineating functional channel watersheds.

The functional channel configurations, interceptor ditches, and vegetative cover were not required for an accelerated action, and they are not part of the final remedy; however, the following text will be modified/added to Section 2.0, Surface Features:

Site accelerated remedial actions resulted in removal of all buildings, except for the former east and west vehicle inspection sheds. All surface pavement has been removed. For a discussion of remaining subsurface foundational elements, see Section 3.0, Subsurface Features. Other site activities resulted in some surface recontouring and revegetation of the former IA, after removal of parking lots and other surface infrastructure features, as necessary, to provide a stable land surface consistent with the end use of RFETS as a wildlife refuge.

The management of site stormwater at the completion of all accelerated actions, including building demolitions, was to allow surface water to flow as sheet flow following the existing contours of the site. An overall goal was to disturb as little of the existing surface as possible while maintaining the sheet flow concept. A design criterion for the site drainage was to maintain soil and slope stability by minimizing erosion. Revegetation and erosion mats and/or hydromulching were utilized to control erosion in areas of disturbed soil and sloping surfaces.

The functional channels were configured to also minimize soil disturbance and were generally placed in areas of existing major surface water drainage features. Erosion was controlled in the functional channels by armoring the entire length of the channel with rip-rap or erosion matting and revegetation. Each of the five functional channels was designed to convey the 100-year storm event as follows:

- Functional Channel (FC)-1: FC-1 drains the northwestern corner of the site by a combination of an existing vegetated channel and a new channel through the soil borrow area directly west of the former Building 371 area. The upstream portion of FC-1 was an existing surface water feature. FC-1 is approximately 2000 feet long and drains an area of 48 acres with a peak flow of 76 cfs.
- FC-2: FC-2 drains an area between and south of the former Buildings 371 and 771 areas by a combination of an existing vegetated channel and a new channel upstream of the existing channel. Much of FC-2 was an existing surface water drainage feature and located in the flowline of large diameter culverts that were removed. A wetland area was constructed downstream of the existing channel before FC-2 flows into FC-3. FC-2 is approximately 1800 feet long and drains an area of 51 acres with a peak flow of 72 cfs.
- FC-3: FC-3 drains the northern side of the site and receives flow from FC-2. FC-3 is located at an existing surface water feature and in the flowline of large diameter culverts that were removed. FC-3 is approximately 1200 feet long and drains an area of 197 acres with a peak flow of 264 cfs.
- FC-4: FC-4 drains the middle and southern portion of the site. FC-4 is located at an existing surface water feature and in the flowline of several large diameter culverts that were removed. A wetland was constructed in FC-4 in an existing flat area of the channel. FC-4 is approximately 3300 feet long and drains an area of 242 acres with a peak flow of 277 cfs.
- FC-5: FC-5 drains the southeastern corner of the site and conveys water into FC-4. FC-5 is the

combination of an existing vegetated channel and a new channel. A portion of FC-5 is an existing surface water feature. The new portion of the functional channel generally follows the flowline of a large diameter culvert that was removed. FC-5 is approximately 1400 feet long and drains an area of 24 acres with a peak flow of 37 cfs.

This work was completed as part of a series of best management practices and was generally guided by the Land Configuration drawings (K-H 2004a) and the Environmental Assessment, Pond and Land Configuration DOE/EA-1492 (DOE 2004). RFETS surface features, including the location of the functional channels are displayed on Figure 2. Overland flow directions and functional channel watershed delineations are displayed on Figure 3.

Please let me know what you think. LMB

-----Original Message-----

**From:** David Kruchek [SMTP:dakruche@smtpgate.dphe.state.co.us]  
**Sent:** Tuesday, July 19, 2005 11:20 AM  
**To:** Rampe, John; Brooks, Laura  
**Cc:** Aguilar.Mark@epamail.epa.gov; Kimmel.Larry@epamail.epa.gov; Sattelberg, Mark; Castaneda, Norma; Surovchak, Scott; Shelton, Dave; Walstrom, Jan; Wiemelt, Karen; EDGAR Ethington; HARLEN Ainscough; Spreng, Carl; Steve Gunderson  
**Subject:** RE: FW: Draft response to comments on the PhysicalCharacteristics SR

Sorry for the delay in responding to the proposed modification to include discussion of the functional channels. We do have the following comments:

1) We would appreciate a bit more discussion regarding the rationale for these channels, as well as the final land configuration. This should identify the reason for their placement and extent, the area intended to be drained, control of overland flow (amount and direction) and runoff/erosion, and reduction of overland flow as well as GW through remaining contaminated structures and areas. We do not expect an extended discussion of the rationale in this section if this will be covered in future sections to be provided. Another couple of sentences or paragraph should suffice to provide the additional information we are requesting as long as this will be fully developed in later sections.

2) Also we would like to have the discussion, as provided, modified to recognize that although the above surface structures/buildings have been removed, some slabs and below grade building structures remain and some of those are contaminated. As it is now, the statement that all buildings and pavement have been removed appears to be misleading and not completely correct, since parts of some buildings remain.

>>> "Rampe, John" <John.Rampe@rf.doe.gov> 07/18/05 09:57AM >>>  
Laura:

I don't think I got back to you on this yet, but this response looks OK to me.

Thanks.

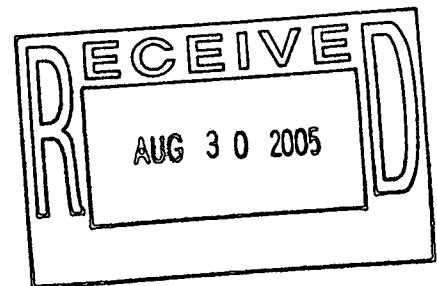
JR

-----Original Message-----

**From:** Brooks, Laura  
**Sent:** Wednesday, July 13, 2005 10:28 AM  
**To:** Kimmel.Larry@epamail.epa.gov  
**Cc:** Aguilar.Mark@epamail.epa.gov; Rampe, John; Steve Gunderson; Wiemelt, Karen; Castaneda, Norma; Sattelberg, Mark; Surovchak, Scott; Shelton, Dave; Spreng, Carl; Walstrom, Jan  
**Subject:** RE: FW: Draft response to comments on the Physical Characteristics SR

Based on subsequent discussions, I am proposing the following change to the response to comments:

Revised Response:  
Figure 2, RFETS Surface Features after Accelerated Actions, will be



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revised for the final draft RI/FS Report to reflect the remaining surface features after accelerated actions are complete. This will include the functional channel configuration. A new Figure 3 will be created displaying overland flow directions.

The functional channel configurations, interceptor ditches, and vegetative cover were not required for an accelerated action, and they are not part of the final remedy; however, the following text will be modified/added to Section 2.0, Surface Features:

Site accelerated remedial actions resulted in removal of all buildings, except for the former east and west vehicle inspection sheds. All pavement has been removed. Other site activities resulted in some surface recontouring and revegetation of the former IA, after removal of parking lots and other surface infrastructure features, as necessary, to provide a stable land surface consistent with the end use of RFETS as a wildlife refuge. In addition, ditches, stormwater conveyances, functional channels and selected ponds have been eliminated or reconfigured as part of a series of best management practices implemented to minimize erosion, meet objectives for slope stability and manage overland stormwater flow. The functional channels were designed for a 100-year event. This work was generally guided by the Land Configuration drawings (K-H 2004a) and the Environmental Assessment, Pond and Land Configuration DOE/EA-1492 (DOE 2004). RFETS surface features, including the location of the functional channels are displayed on Figure 2. Overland flow directions are displayed on Figure 3.

Is this ok? LMB

> -----Original Message-----

> From: Kimmel.Larry@epamail.epa.gov

[SMTP:Kimmel.Larry@epamail.epa.gov]

> Sent: Tuesday, June 07, 2005 10:08 AM

> To: Brooks, Laura

> Cc: Aguilar.Mark@epamail.epa.gov; Rampe, John; Steve Gunderson; Wiemelt, Karen; Elizabeth Pottorff; Castaneda, Norma; Sattelberg, Mark;

Surovchak, Scott; Shelton, Dave; Ross.Lorraine@epamail.epa.gov

> Subject: Re: FW: Draft response to comments on the Physical Characteristics SR

>

> Hi Laura,

>

> We have reviewed the responses to comments on the Site Characteristics

> report and concur with the responses with a minor exception to the

> General comment. That comment requests information to be provided in the

> document regarding final site configuration, including functional

> channels. Currently, no discussion of site configuration is planned.

> As discussed with you and Karen Wiemelt, EPA believes that final site

> configuration is an integral related component to the site remedies.

We

> have proposed that a brief discussion of the site configuration

> objectives and figures would be sufficient to cover this issue.

Please

> call me at 303-312-6659, if you have further questions.

>

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> Thanks,

> Larry  
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 > Larry Kimmel  
 > EPA Remedial Project Manager  
 > 303-312-6659 office  
 > 303-808-2045 cell  
 > kimmel.larry@epa.gov  
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 > "Brooks, Laura"  
 > <Laura.Brooks@rf  
 > ets.gov>  
 To  
 > Larry  
 Kimmel/EPR/R8/USEPA/US@EPA  
 > 05/23/2005 03:25  
 cc  
 > PM  
 >  
 > Subject  
 > FW: Draft response to comments  
 on  
 > the Physical Characteristics  
 SR  
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 > Hi Larry,  
 > I have sent this to the RFCA PCs, but since Mark is out most of this  
 > week (and you helped review the document and sent me EPA's  
 > comments),  
 I  
 > thought I would forward this to you. Thanks, LMB  
 >  
 > > -----Original Message-----  
 > > From: Brooks, Laura  
 > > Sent: Monday, May 23, 2005 3:20 PM  
 > > To: Steve Gunderson; 'aguiar.mark@epamail.epa.gov';  
 Legare,  
 > Joe; Shelton, Dave; Walstrom, Jan; Surovchak, Scott; Schassburger,  
 > Richard; Sattelberg, Mark; Rampe, John  
 > > Subject: Draft response to comments on the Physical  
 > Characteristics SR  
 > >  
 > > > <<051805Physical Characteristics Response to Comments.doc>>  
 > Attached is the Draft Response to Comments on the Physical  
 > Characteristics Summary Report. Please review and let us know if you  
 > have any comments. Once the response to comments are approved, I  
 will  
 > incorporate the changes, turn the summary report into RI, Section 2,

- > Physical Characteristics of the Study Area, and place section 2 on the  
> DOE website. LMB  
> (See attached file: 051805Physical Characteristics Response to  
> Comments.doc) << File: 051805Physical Characteristics Response to  
Comments.doc >>